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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,453	02/21/2002	David Puig-Oses	020276	1015
23696	7590	08/01/2006		
QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			EXAMINER HALIYUR, VENKATESH N	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,453

Applicant(s)

PUIG-OSÉS ET AL.

Examiner

Venkatesh Haliyur

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 05/09/2006 has been considered but is ineffective to overcome Zhang et al. and Ponnekanti reference. Please see rejections below.
2. Claims 1-9 are pending in the application.

Claim Rejections - 35 USC § 112

3. Claims 1,5,8,9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Amendment to claims 1,5,8,9 recite ***“wherein the condition of the transmission channel determines a transmission rate of the channel quality value over the feedback channel”***, however this subject matter is not described in the specification and hence the amendment to claims 1,5,8,9 is considered as new subject matter.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent,

except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,5,6,8,9 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. [US Pub: 2004/0013103].

Regarding claim 1,5, Zhang et al. disclosed in their invention of "Communication of Control Information in Wireless Communication Systems", a method for controlling the operation of a quality feedback channel in a wireless communication system for determining a channel quality value associated with a transmission channel, determining a condition of the transmission channel, if the transmission channel condition is favorable, then transmitting the channel quality value over one slot of the channel quality feedback channel, and if the channel condition is not favorable, then transmitting the channel quality value over a plurality of slots of the channel quality feedback channel [Figs 1-6, Para 0001-0033, abstract].

Regarding claim 3, Zhang et al. disclosed the condition of the transmission channel is based upon a power level estimate [Para 0014].

Regarding claim 6, Zhang et al. disclosed transmitting the channel quality value over more than one slot of the feedback channel by repeating the channel quality value over a frame of the feedback channel [Para 0001-0026, abstract].

Regarding claim 8,9, Zhang et al. disclosed a method for improving the reception of a channel quality value at a base station, comprising, determining whether the condition of a feedback channel from a remote station is favorable, if the condition of the channel is unfavorable, then transmitting a control signal to the remote station, wherein

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the control signal triggers a reduced rate mode for transmitting the channel quality value over a feedback channel from the remote station, and if the condition of the channel is favorable, then allowing the remote station to control the transmission of the channel quality value over the feedback channel [Figs 1-6, Para 0001-0065, abstract].

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,4,7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al. [US Pub: 2004/0013103] in view of Ponnekanti [US Pat: 2002/0150065]

Regarding claim 2, Zhang et al. disclosed transmission (traffic) channel and feedback channel [Para 0001-0008, abstract] but fails to disclose the condition of the transmission channel is based upon a velocity estimate.

However, Ponnekanti disclosed in their invention of "Communication Systems" a detecting and estimating means for the relative movement (velocity) of transmitting and receiving apparatus [Figs 1-17, Para 0017-0019].

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the teachings of Ponnekanti on the method of estimating

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relative movement of transmitting and receiving apparatus to include in the system of Zhang et al to detect the condition of the transmission channel based upon the velocity.

Regarding claim 4, Zhang et al. disclosed sending the quality of the transmission channel in the feedback channel but fails to disclose the condition of the transmission channel is based upon whether a fast fade occurs in the transmission channel.

However, Ponnekanti disclosed a method for determining whether a transmission signal has faded or not [Figs 1-17, Para 0019-0021,0230-0232].

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the teachings of Ponnekanti on the method of determining whether a transmission signal has faded to include in the system of Zhang et al to determine whether a fast fade occurs in the transmission channel.

Regarding claim 7, Zhang et al. disclosed transmission (traffic) channel and feedback channel [Para 0001-0008, abstract] but fails to disclose determining the traffic channel condition is unfavorable if a first station and a second station travel at a high velocity in relation to each other and the first station originates the feedback channel and the second station originates the transmission channel.

However, Ponnekanti disclosed a method for determining the traffic channel condition fades if relative movement (distance) between the transmitting station (first station) and receiving station (second station) increases (travel at a high velocity in relation to each other) and the first station originates the feedback channel and the second station originates the transmission channel [Para 0017-0091].

Therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the teachings of Ponnekanti on the method of determining the traffic channel fading condition due to increase in relative movement between the first and the second station to include in the system of Zhang et al. do determine the traffic channel condition is unfavorable if a first station and a second station travel at a high velocity in relation to each other and the first station originates the feedback channel and the second station originates the transmission channel.

Response to Arguments

5. Applicant's argument with respect to claims 1-9, see remarks filed on 05/09/2006 have been fully considered but they are not persuasive to overcome Zhang et al. and Ponnekanti reference.

With reference to applicants argument for claims 1,5,8,9, examiner fails to locate the amended matter ***“wherein the condition of the transmission channel determines a transmission rate of the channel quality value over the feedback channel”*** in the specification and at best can be traversed to page 3 (para 1008), page 8 (para 1029), page 9 (para 1030), page 10 (para 1037), page 11 (para 1042) but the corresponding description fails to disclose the claimed invention.

Please note that by merely deleting the amended portion of the claims in response to this final office action would cause the claim rejections communicated via first office action dated 02/06/2006 to be in effect.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached @ (571)-272-3139. Any inquiry of a general

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nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

Venkatesh Haliyur

Patent Examiner

UH
07/26/06


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER